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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/592,148	06/12/2000	Tae Joon Park	2950-0160P	5121

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Birch Stewart Kolasch & Birch LLP
P O Box 747
Falls Church, VA 22040-0747

EXAMINER

SHERR, CRISTINA O

ART UNIT	PAPER NUMBER
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3621

MAIL DATE	DELIVERY MODE
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12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/592,148

Applicant(s)

PARK, TAE JOON

Examiner

Cristina Owen Sherr

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39, 41-45, 50-56, 58 and 59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39, 41-45, 50-56, and 58-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to applicant's amendment filed October 10, 2007. Claims 39, 41-45, 50-56, and 58-59 are currently pending in this case. By previous amendments, claims 1-38, 40, 46-49, 57, and 60-69 have been canceled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 39 recites the limitation "the scrambled digital data, identification information, and copy prevention information" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim. Thus, independent claim 39 and its dependent claims 41-44 are rejected under section 112.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 56, and its dependent claims 58-59 are rejected under 35 U.S.C. 101 because claim 56 merely recites nonfunctional descriptive material.

6. The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993). "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

When nonfunctional descriptive material is recorded on some computer-readable

medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diamond v. Diehr*, 450 U.S. 175, 185-86, 209 USPQ 1, 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) (“[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.”) (quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) (“form of the claim is often an exercise in drafting”). Thus, nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 39, 41-45, 50-56, and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subler et al (US 5,646,992) in view of Kanota et al (US 5,418,853).

9. Regarding claim 39 –

Subler discloses a method for transmitting digital data (e.g. col 1 ln 30-50), comprising: scrambling digital data and transmitting the scrambled digital data (e.g. col 14 ln 23-28), identification information (e.g. col 14 ln 1-5), the data group including a header and the header including the identification information (col 1 ln 25-40, col 4 ln 60-65).

10. Subler does not disclose, but Kanota does, the specific feature of copy prevention, at, e.g., fig 2, wherein Kanota shows specifically copy protection and control for video encryption. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Subler and Kanota since encryption of software or digital data as in Subler is equivalent to copy control as in Kanota.

11. Regarding claim 41 –

Subler discloses wherein the transmitting step transmits the control data as part of the data group. (e.g. col 2 ln 28-46).

12. Regarding claim 42 –

Subler discloses encrypting the control data prior to the transmitting step; and wherein the transmitting step transmits the encrypted control data as part of the data group. (e.g. col 9 ln 40-60).

13. Regarding claim 43 –

Subler discloses wherein the encrypting step encrypts the control data based on a key. (e.g. col 8 ln 35-50).

14. Regarding claim 44 –

Subler does not disclose, but Kanota does, wherein the copy prevention information includes one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data. (e.g. col 4 ln 61- col 5 ln 14).

15. Regarding claim 45 –

Subler discloses a method for recording digital data (e.g. col 1 ln 30-50), comprising: scrambling digital data and recording the scrambled digital data (e.g. col 14 ln 1-5), identification information, and control data as part of a data group, the data group including a header and the header including the identification information and the control data, (e.g. col 1 ln 25-40, col 4 ln 60-65).

16. Subler does not disclose, but Kanota does, the specific feature of copy prevention, at, e.g., fig 2, wherein Kanota shows specifically copy protection and control for video encryption. Further, Subler does not disclose, but Kanota does, wherein the scrambling step scrambles the digital data based on control data such that the control data controls a parameter of the scrambling operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the

teachings of Subler and Kanota since encryption of software or digital data as in Subler is equivalent to copy control as in Kanota.

17. Regarding claim 50 -

Subler does not disclose, but Kanota does, wherein the copy prevention information includes one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data. (e.g. col 4 ln 61 – col 5 ln 14).

18. Regarding claim 51 –

Subler discloses a method of processing protected digital data (e.g. col 1 ln 30-50), comprising: receiving a data group including identification information, control data and scrambled digital data (e.g. col 14 ln 1-5), the data group also having a header and the header including the identification information (e.g. col 4 ln 60-65).

19. As above, Subler does not disclose, but Kanota does, the specific feature of copy prevention, at, e.g., fig 2, wherein Kanota shows specifically copy protection and control for video encryption. Further, Subler does not disclose, but Kanota does, wherein the scrambling step scrambles the digital data based on control data such that the control data controls a parameter of the scrambling operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Subler and Kanota since encryption of software or digital data as in Subler is equivalent to copy control as in Kanota.

20. Regarding claim 52 –

Subler does not disclose, but Kanota does, wherein the receiving step receives copy prevention information as part of the data group, and further including, performing a copy prevention function based on the copy prevention information. (e.g. col 4 ln 61 – col 5 ln 14).

21. Regarding claim 53 –

Subler discloses wherein the receiving step receives encrypted control data as part of the data group; and further including, decrypting the encrypted control data prior to the descrambling step. (e.g. col 9 ln 40-60).

22. Regarding claim 54 –

Subler discloses wherein the decrypting step decrypts the control data using a key. (e.g. col 8 ln 35-50).

23. Regarding claim 55 –

Subler does not disclose, but Kanota does, wherein the copy prevention information includes one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data. (e.g. col 4 ln 61 – col 5 ln 14).

24. Regarding claim 56 –

Subler discloses a data storage medium (e.g. col 1 ln 30-50) comprising:
a data group area including a header area and a digital data area (e.g. col 4 ln 60-65);
the header area including an identification area and a control data area (e.g. col 4 ln 55-65)

25. As above, Subler does not disclose, but Kanota does, the specific feature of copy prevention, at, e.g., fig 2, wherein Kanota shows specifically copy protection and control for video encryption. Further, Subler does not disclose, but Kanota does, wherein the scrambling step scrambles the digital data based on control data such that the control data controls a parameter of the scrambling operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Subler and Kanota since encryption of software or digital data as in Subler is equivalent to copy control as in Kanota.

26. Regarding claim 58 –

Subler discloses wherein the control data area stores encrypted control data (e.g. col (e.g. col 8 ln 35-50).

27. Regarding claim 59 –

Subler does not disclose, but Kanota does, wherein copy prevention information is provided in the control data area and includes one of current generation information and allowable generation information, the current generation information indicating a number of times digital data has been copied and the allowable generation information indicating a number of permitted copies of the digital data. (e.g. col 4 ln 61 – col 5 ln 14).

28. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures

may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30. Walker et al (US 5,054,064) disclose a video control system for recorded programs.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina Owen Sherr whose telephone number is 571-272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

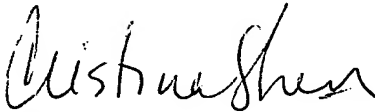
32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Fischer can be reached on 571-272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

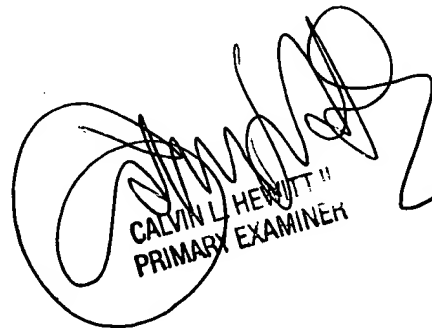
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cristina Owen Sherr
Patent Examiner, AU 3621



CALVIN L. HEWITT II
PRIMARY EXAMINER